

*Puerperal Fever #1*

No 67.

An Essay

on Puerperal Fever

By Martin Barr of Pennsylv<sup>a</sup>  
passed March 30. 1816





*Faint, illegible handwritten text, possibly a date or address.*

*Faint, illegible handwritten text, possibly a name or title.*

*Of the Court of Sessions  
for the County of Middlesex*

An Epem  
on  
Puerperal Fever



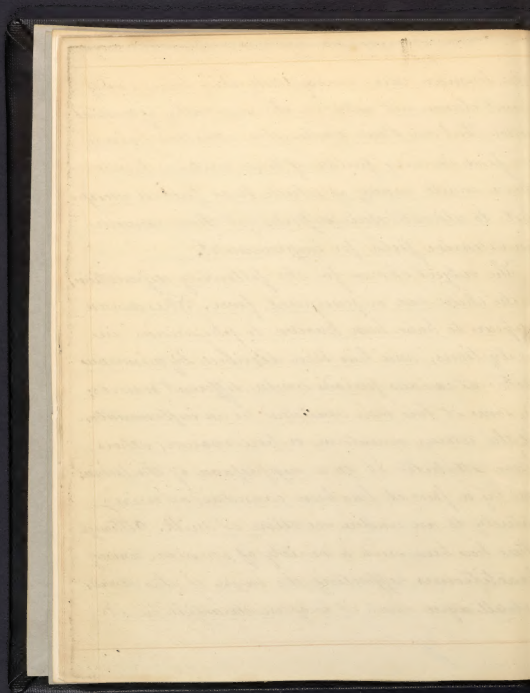
Those diseases to which women, are peculiarly subject, form so considerable and important a portion of the practice of a physician & those especially connected with pregnancy, are so very interesting to him that they have particularly drawn the attention of medical men to the means most proper to alleviate them. The duty imposed on them by their creator for the continuation of mankind; subjects them to more than an equal share of the miseries that afflict

On Ship  
on

Discharge

the human race; consequently they have a very great claim not only on the sympathy of medical men but on their particular attention; since we find in every period of time exertions have been made many of which have proved successful to alleviate their distress; yet there remains an extensive field for improvement.

The subject chosen for the following dissertation, is the child-bed or puerperal fever. This disease appears to have been known to physicians in early times, and has been described by numerous writers at various periods under different names; by some it has been considered as an inflammation of the uterus, omentum or peritonaeum; others have attributed it to a suppression of the lochia; and by a few it has been considered as owing entirely to an undue secretion of milk. Although there has been such a variety of opinion among practitioners respecting the cause of this disease, yet all agree that it is often dreadful in its



nature and fatal in its issue. There are many melancholy testimonies of its fatality and the uncertainty of every method of cure that has been proposed. On the authority of Doct. Young we find this disease very fatal at Edinburgh as late as the year 1774, and he informs us that almost every woman, as soon as she was delivered was attacked with the disease and that not one recovered, although every method was tried to cure the disorder. Doct. Rush also tells us that death from puerperal fever was very common between the years 1760 & 1776 in Philadelphia.

It is not surprising that a disease which forms so considerable a portion of the complaints of puerperal women, and which is so remarkable for its fatal termination, should have excited the attention of physicians; we consequently find that medical men began very early to investigate its nature and find means to prevent

*[The page contains extremely faint, illegible handwriting, likely bleed-through from the reverse side. The text is arranged in approximately 20 horizontal lines across the page.]*



its ravages.

That so little progress has been made in the knowledge of those diseases which attack child bearing women, must be attributed to the imaginary theories of the puerperal state that have been taught and received.

We are apt to neglect simple truth for the mere inventions of the mind that may be created at pleasure: but let it be remembered that the slightest remark drawn from real observation, is of more utility and gives greater satisfaction to a judicious enquirer, than the most extensive theory of causes drawn from hypothesis alone.

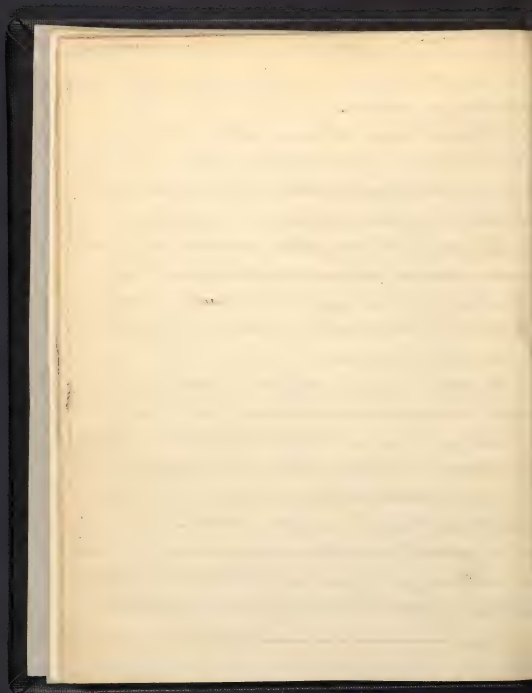
Although much has been said against theory in medicine, yet it has been considered by some as the greatest desideratum in the science of medicine, to have a theory established on the solid base of accurate observation. I believe that such a theory has been deduced from observation, since experiment the only test of truth

*[The page contains extremely faint, illegible handwriting, likely bleed-through from the reverse side. The text is arranged in approximately 15 horizontal lines across the page.]*

has taught us that it leads to a successful  
treatment of disease.

The theory of asthma, teaches that disease consists  
in a morbid & irregular action of the system,  
and that this irregular action, by the variation in  
it's seat, the diffuseness of it's seat, and the greater  
or less time of it's duration, produces all the nu-  
merous diseases incident to the body. It rejects  
the idea of pursuing for the cure of a disease,  
and confines the attention of the physician to the  
state of the system.

Trisism. There is no subject in medicine, per-  
haps, concerning which, there has been a greater  
diversity of opinion than in trisism, and though the  
greatest number of authors it is considered as  
of a low putrid nature; by others as highly  
inflammatory; by our own countrymen it  
it is generally considered as a disease of irre-  
gular action, but frequently the inflammatory  
action passes into the typhoid state, which



may be known by the pulse becoming frequent  
small and quick, a great inclination to sleep,  
clammy sweats, terror of the alimentary canal,  
&c.

The period of time at which this descends on  
the patient, is very uncertain, sometimes she  
is free from all symptoms of the disease for  
a week after parturition; but the most fre-  
quent time of attack, is on the second or third  
day after that event.

It almost always comes on with a cold  
stage, accompanied with the usual signs of  
fever, as great thirst, pain in the head especi-  
ally over the temples. The skin is hot and dry,  
sometimes, partially moist. The tongue at  
first, is forced and white; but becomes cov-  
ered with a dark crust. The pulse varies, some-  
times small, at others full and hard, uncom-  
monly very frequent from 100 to 120. Shudder-  
ing, given, as felt in the legs, with great anx-

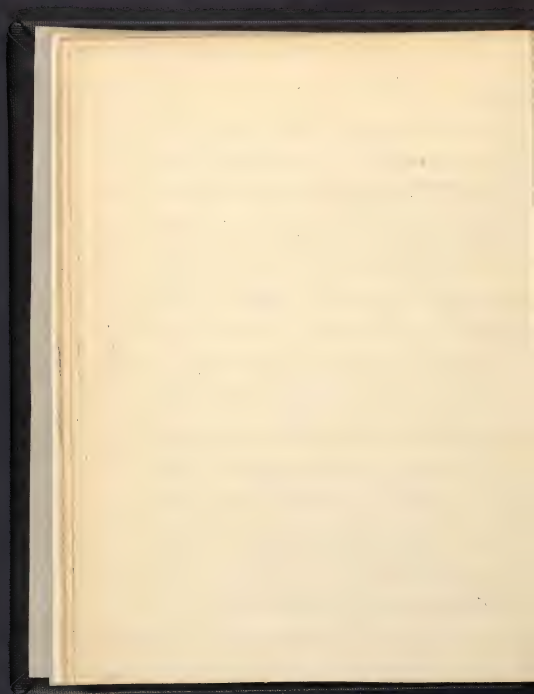


ity are increasing.

As the disease advances the whole abdomen becomes affected with excruciating pain, and so extremely sore to the touch, that even the bed clothes by their weight cause great distress; and at the same time a swelling generally commences which sometimes increases so rapidly that in a very short time the woman appears as large as before delivery.

Respiration is performed with great difficulty, the motion being not so laborious from compression of the diaphragm. There is likewise much pain in the back, hips are bowed or bent, and swollen legs are frequent accidents.

The face is sometimes flushed, but generally pale, and there is a rapid appearance, even and action which are signs both of body and mind. great prostration of strength, the loss of sleep, with insupportable anxiety about her child, are so common to make it.

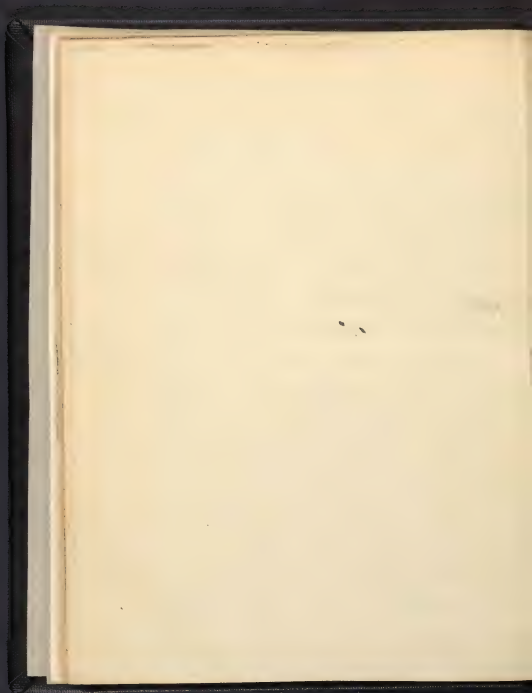




It is a more violent attack, the  
onset seems so violent, as to produce the most  
violent of delirium, sometimes in the form  
of the mania, as above, is a violent  
onset, as a long, violent, violent. In fact  
as a most violent, they are violent, violent  
at the commencement, but as the disease progresses  
as a delirium after a while, the attack becomes  
violent and violent.

Violent delirium seldom happens, but when  
the system has almost sunk and is suffering,  
and the faculties of the mind become  
deranged. The patient is much disturbed in  
sleep, and is often disturbed, and  
they are in great anxiety.

If the delirium  
attacks the patient before the mind has been deter-  
mined to the heart, it seldom appears; but if  
it has been so, it is seldom subsides,  
but is generally violent in severity, and



much altered in taste and colour.

The Lochia are seldom suppressed but as the disease progresses becomes much altered in quality and quantity.

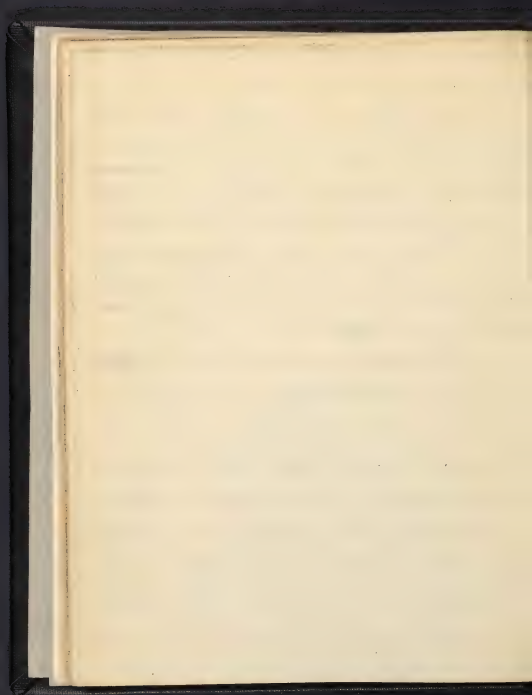
The urine is small in quantity, is incoherent frequently with great pain, and is high coloured.

Blood drawn from a vein has different appearances, depending on the violence of the disease. Sometimes it is bloody sized; and sometimes it is defecated.

The patient generally loses her appetite at the commencement of the disease.

In sleep the eyes are half closed, and the mouth remains generally open.

The pulse now sinks; the secretions become cold and clammy; the lips, teeth, and tongue, are covered with a black crust; icterus returns; the lips cover the whole internal surface of the mouth and fauces; discharging most of urine; involuntary discharges of feces; and it emits



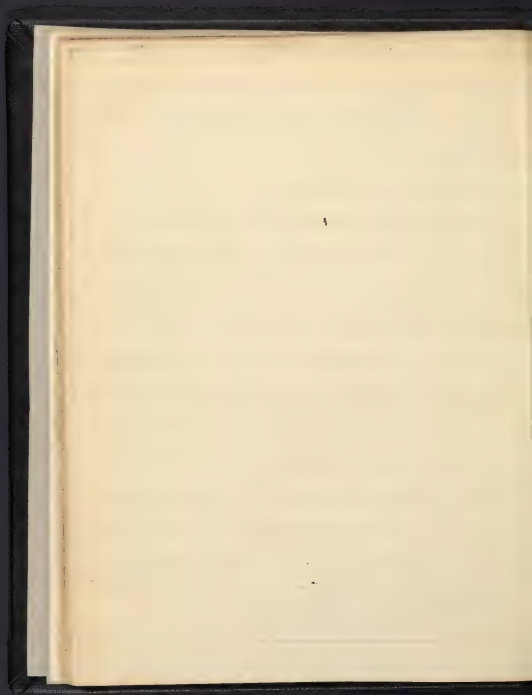
anecdotes are decisive, shows the evolution of the disease.

Such is the course of purpura, although it may be more or less, to the constitution of the patient, the degree of violence, and the earlier or later attack of the disease.

Purpura, however, generally terminates in a short time, if no assistance is afforded, but it is sufficient to show the hope of those who are attacked with it, die on the fifth day. There are, however, in which death does not occur until the twentieth day, and in others again on the second day after the attack of the disease.

If the disease terminates favourably, the recovery will be very tedious, and the patient requires great care and attention.

The symptoms considered as favourable to life, are the reappearance of the lacteal when it has been suppressed, the gradual subsidence of the swelling and soreness of the abdomen, with a moist skin.

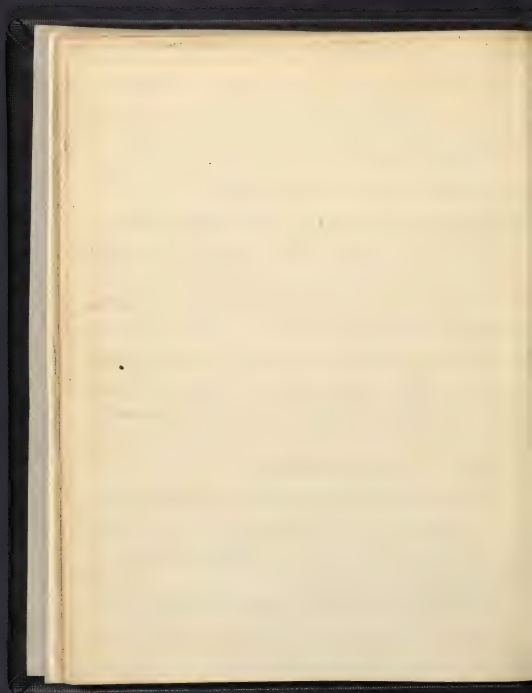


## Remote and Predisposing Causes.

The remote causes of this disease, are such as produce debility in the system generally, and in the uterus locally, the latter is the predisposing cause. That debility is the first in order, may be inferred, 1<sup>st</sup> from the disease striking the patient shortly after parturition, when the system has been debilitated by the various labours; 2<sup>d</sup> from it, attacking those females most frequently who are of a very delicate make and constitution; 3<sup>d</sup> from it, being very frequent in those who are subject to violent suppers at the time; and 4<sup>th</sup> by it, generally striking the patient in the evening, when the body is most exhausted.

The remote causes may be divided into general and local, and are either immediately, and the second indirectly through the medium of the system.

I shall first notice the local ones, that

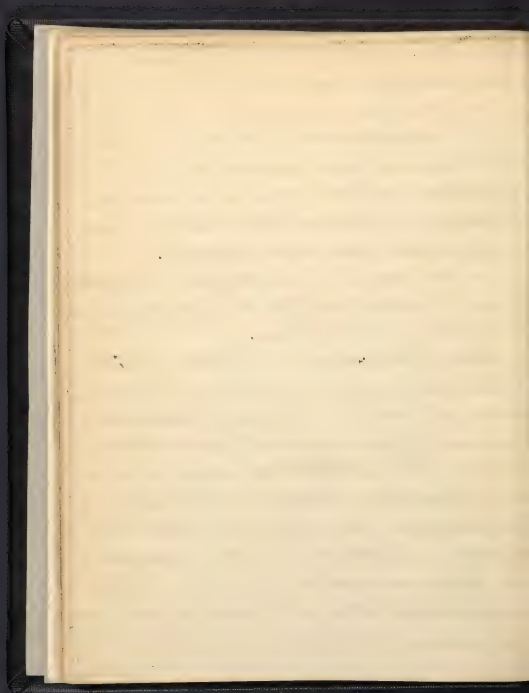




produce debility in the uterus, by acting directly  
on it. It then appears to be injuries done to the  
parts by very difficult or protracted labour;  
harsh treatment of the accoucheur during  
inversion; violence offered in extracting the  
placenta, and pressure on the uterus, by banda-  
ges applied too tight to the abdomen.

I now proceed to mention the causes that  
appear to produce debility through the medi-  
um of the general system.

Many of the modes and customs of civil-  
ized society may be considered as causes pro-  
ducing this disease. Improper fashions, such  
as wearing tight corsets; and apparel too  
tight for the <sup>changes</sup> ~~in~~ <sup>in</sup> the atmosphere; excess in  
diet, stimulating drinks, confined air, heat  
from too great quantity of fire & ether, or  
epidemic constitution of the atmosphere,  
may all be considered as causes producing  
debility through the medium of the system.



Therefore when this predisposition exists in the system generally, or in the uterus locally, any of the exciting causes act upon it they produce morbid or irregular action in the sanguiferous system; and this irregular action falls with greater force on the uterus and surrounding parts, on account of the accumulated excitability which exists in them after parturition.

Exciting Causes. The causes which excite this disease, are all such stimuli as act on the system when predisposed to disease; and many of the causes before enumerated as remote, may prove the exciting cause. Some of the causes before noticed may account for it, namely, attacking the patient directly after parturition when the system has been weakened and its excitability increased; hence when any stimulus is applied disproportionate to the excitability in the system,



it proves the cause of morbid action, which is determined to the interior by finding there the weakest part in the body, and it is this local predisposition, which invites irregular ~~and~~ <sup>or</sup> morbid excitement; as certainly, to use the words of Dr Broun, as the electric fluid is attracted by the rod.

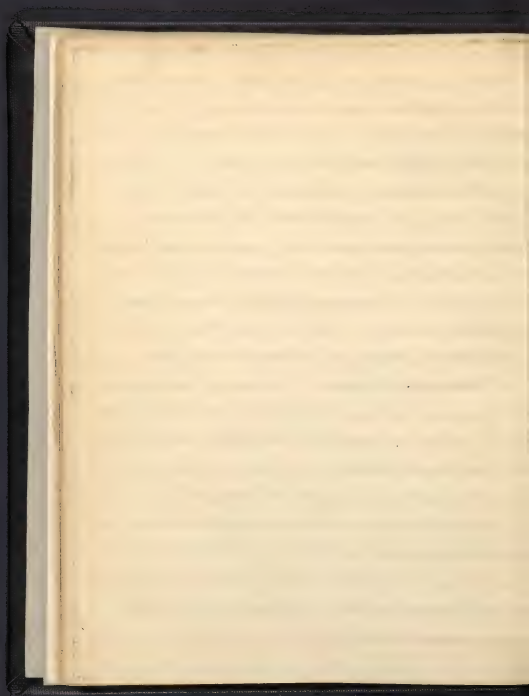
Admitting the interior, as before mentioned to be <sup>the</sup> weakest part in the body, authorises my saying that the disease is seated in the interior; for we are well assured that when the body is labouring under debility, it is very liable to disorder, that the weakest stimuli may sometimes produce disease; and if any part has a greater degree of weakness than another, it is this part the disease will first attack and show itself.

Viewing the body in this state, when the smallest impression has the effect, we may readily conceive the influence, that heat from



too great quantity of blood, stimulating  
drinks, pressure on the uterus by bandage,  
applied too tight to the abdomen and ob-  
structed <sup>or</sup> respiration, may have in produ-  
cing this disease; which is violent and  
fatal only, in proportion to the remote  
predisposing and exciting causes; and with-  
out the last no disease can be produced,  
for they are the cause of the morbid and  
irregular action which produces the  
proximate cause of puerperal fever.

Proximate Cause. The use of <sup>the</sup> disease depends  
very much on a knowledge of the proximate causes,  
hence when we recollect how fatal this disease  
is to puerperal women, it is not surprising, that  
it should excite physicians to attempt to discover  
the proximate cause; we accordingly find various  
opinions advanced on this subject. But in this  
disease as in many others the effect has been  
considered as the cause. We therefore first observe

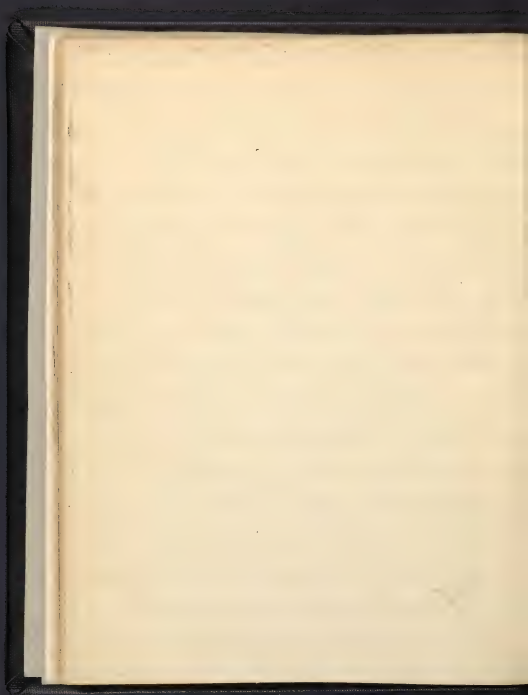




operation of the lochia, implies secretion of milk  
a simple inflammation of the uterus, or periton-  
ium have all been considered as the cause.

But a suppuration of the lochia is not the  
cause may be inferred, from its sometimes con-  
tinuing through the whole course of the fever of  
a natural small-pox appearance. It may also  
be inferred that an increased secretion of the  
milk is not the cause, from the disease pre-  
ceding the attack of the patient. Before the milk has  
been determined to the breasts, or if it has in-  
creased, it has been taken place in it, appearance.

It has been supposed that an inflammation  
of the uterus or peritonium is the cause by the  
nervous system sympathizing with those parts;  
but it may more easily be considered as the  
effect of increased and irregular action of the  
menstruous system determined to those parts  
by stimuli; I therefore would conclude that the  
increased use of the uterus, is an effect of



marks action of the arterial system but debility is marks of being sealed in the arteries by fibrine, thus the greatest degree of debility. The appearances in the neighbouring parts are the effect of sympathy from the contiguity of situation. Why debility in a part should make it more liable to disease when the whole system is under the influence of increased arterial action will not appear difficult to explain. When a part is weakened in the sanguiferous system, say much excited, that part being unable to bear the injection of the blood, is certainly most liable to disease.

Appearances on Dissection. on dissection the morbid appearances are principally confined to the abdomen; but sometimes the thorax exhibits marks of disease. On opening the abdomen you sometime find a quantity of purulent or serous matter. The uterus and its appendages, with the ovaries are free-



case exhibit inflammatory appearances; the  
bladder and intestines often show marks of disease;  
sometimes these parts are mortified. These appear-  
ances are sufficient proofs of its malignant  
nature, and its being seated generally in  
these parts.

Cure. Having concluded the history and  
causes with the appearances on dissection.  
I now proceed to the curative part of my  
subject.

In a disease so violent in its attack,  
so rapid in its course, and generally so fatal in  
its terminations; every exertion should be  
made as early after the attack as possible  
to prevent its progress.

It is surely the same diversity of opinion  
that now exists among physicians concerning  
the cause and nature, have existed also respecting  
the remedies to be employed in the cure  
of this disease.

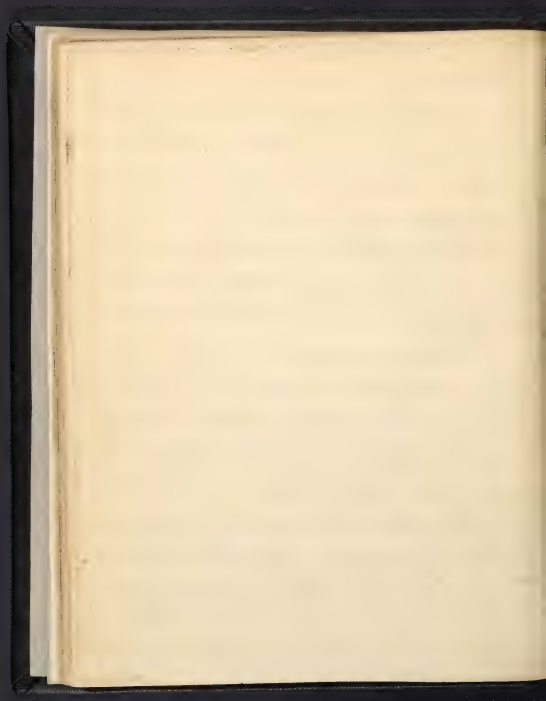


When we meet a diversity of opinion, it will be best to pursue that method of treatment which the state of the system or existing circumstances seem most to indicate.

As it was noticed before that this disease changes frequently from the inflammatory to the tubercular state, the remedies to be employed for the cure of it must be divided into classes suited to these opposite states of the system.

The remedies for the inflammatory state of this fever, are all such as by their operation on the system, diminish the expansive action of the blood vessels, and such as prevent local congestion and serious effusions in vital parts.

The first and most important of these remedies which I shall mention, is bloodletting. The frequency of bloodletting in this fever has a middle



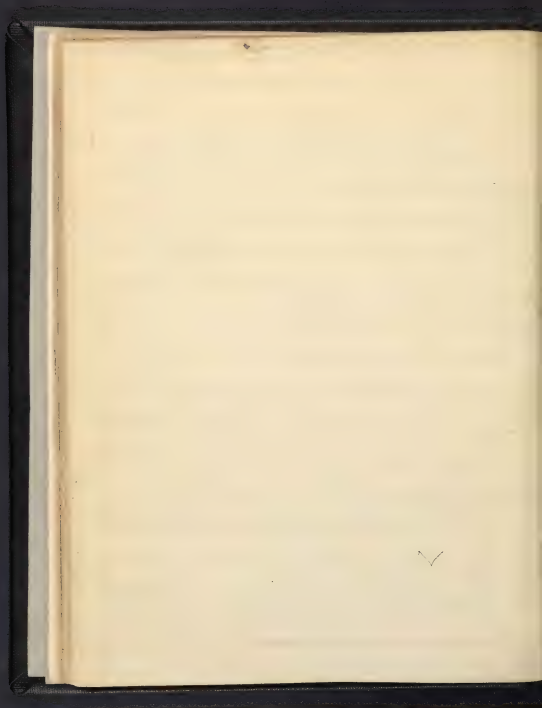


if such doubts among practitioners were very much opposed to ever being away, which others have much recommended its adoption.

Dr. Linnæus recommends copious bleeding at the commencement of the disease.

Dr. Gordon says much in its favour in a very interesting account of the fever that prevailed at Gibraltar, in which we are informed that the disease was infectious, and commenced its attack with violent and unmitigated pain in the abdomen, with a very frequent pulse after the in a minute. He states that if he was called to see the patient within 24 hours after the attack he always took away 20 ounces of blood, which was always signs, and he further informs that he seldom writes in effecting a cure if he was permitted to pursue this plan of treatment.

Dr. Linnæus also informs us that the



remedies which succeed best in his hands, were  
bleeding freely, purging actively, and blistering  
the abdominal region.

The propriety of bloodletting in this  
disease is established beyond controversy  
by the success of many eminent practitioners  
in medicine; and when we are solemnly instructed  
in its inefficacy, we may attribute it  
to an improper use of the remedy or to some  
other peculiarity.

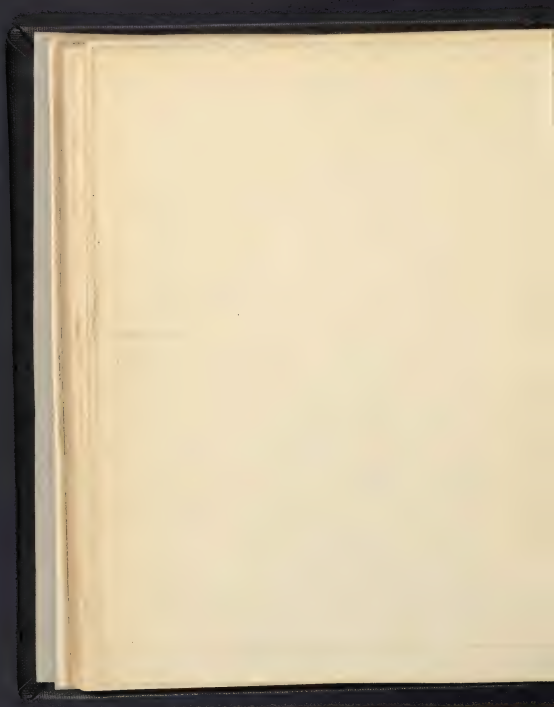
To lay down precise rules as to the  
time it should be employed, and the quantity  
to be drawn would only tend to misguide the  
practitioner who thereby produces mischief  
chiefly but I presume to the extent which  
our physicians have a right, and which is an  
exceedingly numerous, I shall not concern it, but  
employ when defusion is tension in the  
peritoneum, or the inflammatory action of the  
bloodvessels requires it, and the quantity



be taken must be regulated by the continuance  
or removal of those signs which call for the  
remedy, and by its beneficial effects on the system.

Bleeding if properly used in this disease  
is one of the most efficacious remedies. But if  
injudiciously employed it is injurious and  
often produces fatal effects.

Controversies are the next remedy that en-  
gage our attention, respecting them there has  
been much diversity of opinion as ~~expressed~~  
about bleeding. Some physicians consider  
this common mode of treating, one of the  
most salutary, and a diarrhoea in those  
indicating it a very dangerous symptom  
and very much opposed their ever being  
used. While others considering it a favorable  
symptom recommend the use of pur-  
gative medicine. That purgatives are useful  
in this disease will certainly be admitted when  
we recollect how injurious costiveness is

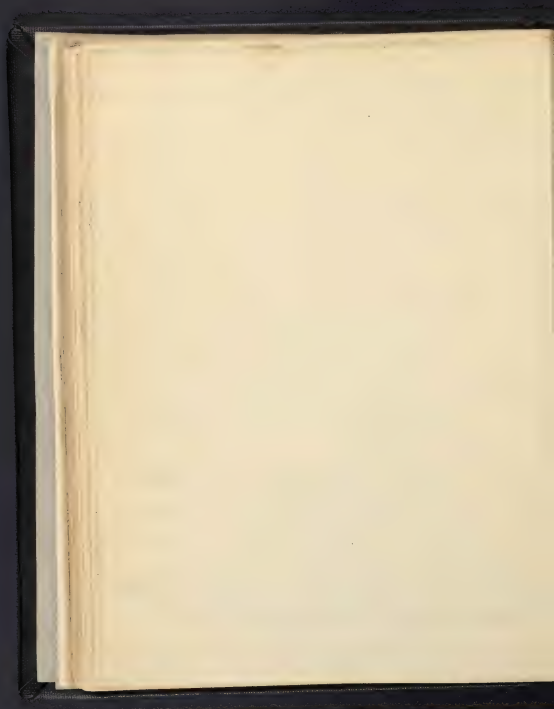


to the body in such, as to cool im-  
mediately less as to heat it in some.

By exhibiting cooling medicines an emol-  
lient waters, and keeping the bowels open  
by them, we prevent the accumulation of  
acrid matter and thus prevent the conse-  
quence of a spontaneous diarrhoea, which  
sometimes prevails in this disease without  
being useful, but often injurious. Some  
cool medicines should be distinguished as  
the more powerful purgatives which if  
exhibited might produce a too copious dis-  
charge, or diarrhoea and thereby hasten  
the patient's death.

In the next place I must notice  
Emetics. Some physicians have been re-  
solutely to them for the cure of malar-  
ia fever.

At the set of the Hotel Dieu at Paris  
who was one of this number was some



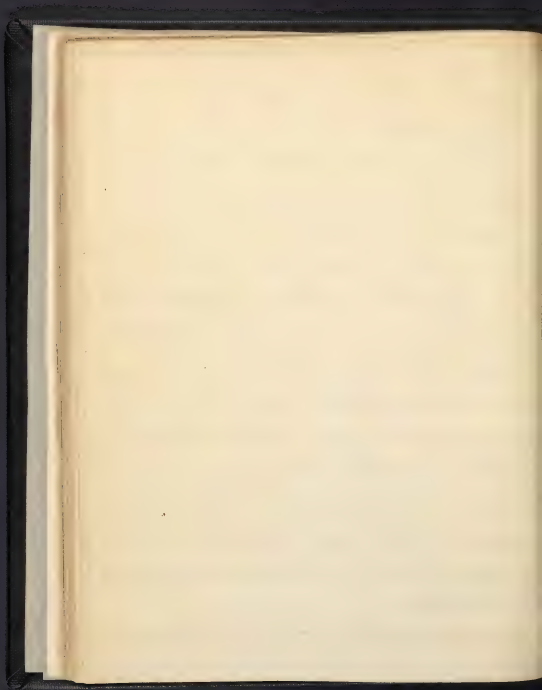


relied entirely on ipecacuanha, made it his practice  
to exhibit an emetic immediately after the attack  
and often repeated it.

Emetics of various kinds may be considered  
as a very valuable remedy in this disease.

But to depend on them entirely would be  
an error; and those who rely on them alone  
for a cure will be worth to themselves very  
much disappointed in their expectations. When  
they are given as auxiliaries to other remedies  
great advantage may be expected from them.

The ipecacuanha may be exhibited with  
advantage to evacuate the stomach of any  
oppressive matter it may contain; besides this  
operation "they agree in, removal of the blood  
vessels, in determining the serum to the blood  
through the veins; and may equalize the ex-  
citement of the motion, by inviting its inces-  
sive degrees, and the blood vessels to the stomach  
and muscles."



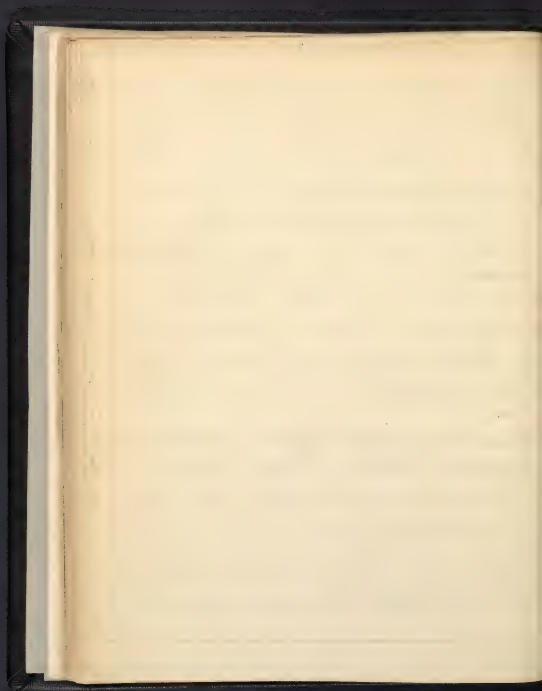
... it is common to see action ... with  
rest of the system, as very considerable quantities could  
not be given until this is reduced, as they are  
found to be almost injurious in ...  
at direct action.

They may however be administered with  
great advantage in most cases, even to produce a  
more or less complete to the surface of the body and  
by these means remove internal congestions and  
improve the morbid action of the blood vessels.

Blisters are the fourth in list remedy  
that I shall mention for the inflammatory  
state of putrid fever. They are a very useful  
remedy in many diseases, and may be re-  
solved very efficacious in this disease, if their  
application be regulated by existing circum-  
stances: if the inflammatory symptoms of the  
disease are violent they should be deferred  
before the application of blisters. If this  
precaution be taken, blisters are of great





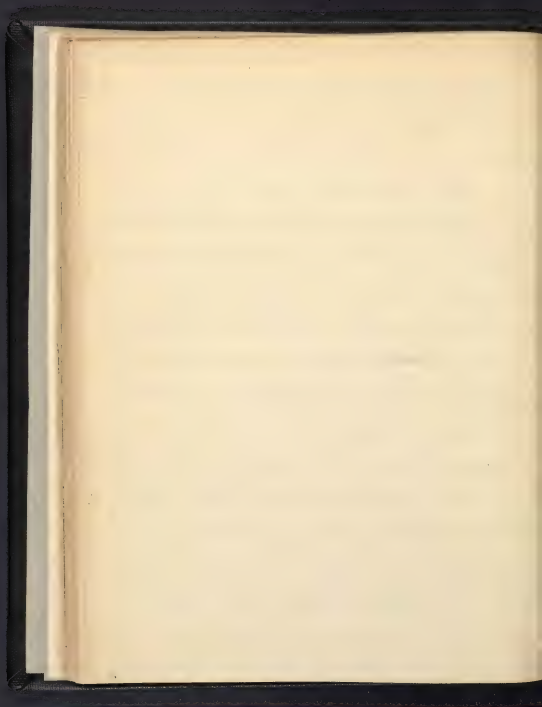


system and by inducing action it would  
but most action in the system by im-  
parting to them more vigorous action. But they  
action?

The remedies producing this effect  
on the system are denominated Stimulants  
and are divided into internal and external.

The internal stimulants are opium,  
nitrate of ammoniac liquor, aconite, prus-  
sian bark, virginia snake root, camphor  
and many others; but those enumerated if  
properly exhibited, are alternately employed  
with <sup>the</sup> sufficient to cure the disease.

Chinin will be found one of the most  
efficacious remedies in the typhoid state  
of the fever, if properly exhibited. Its  
proper exhibition requires the physician  
to be very attentive to the pulse to prevent  
its elevating the system into inflammatory  
action, or to prevent the opium raising





a sedative effect on the system. This sedative effect is to be obviated by giving the opium in such a manner that each dose may be exhibited before the stimulating effect of the preceding dose has subsided.

Distilled & fermented liquors will be found very efficacious if properly given; especially wine and porter these should be given in pretty large quantity if the state of the system will permit. The peruvian bark, camphor, virginia snake root, and many other stimulants may be employed in succession with advantage.

The external stimulants are blisters, cataplasms, and the warm and hot baths. The physician should be very cautious how he uses stimulants in puerperal fever whether he uses them internally or externally; for by not being very attentive he may produce a dangerous or fatal inflammatory action or a degree of



prostration from which the system cannot be raised.

The method most proper of giving stimulents will be to begin <sup>with</sup> the mildest of them, and be regulated by existing circumstances.

But I may safely say that those medicines which have been enumerated, when employed by a practitioner acquainted with his art and attentive to his patient, may be employed with the greatest prospect of affording relief to suffering humanity.

